



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,824	10/23/2003	Frederic Malet	ATOCPM-0304	5421
23599	7590	12/13/2006	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			WOODWARD, ANA LUCRECIA	
		ART UNIT	PAPER NUMBER	1711

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/690,824	MALET ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ana L. Woodward	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE Three MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on November 14, 2006

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-14 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 7, clarification is requested as to what “their crystallinity” is referring to.

In claim 1, last line, “and group”, as opposed to --end groups--, is queried.

In claims 9 and 14, there is no express antecedent basis for “the crystalline” monomer.

### ***Claim Rejections - 35 USC § 102/103***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 and 9-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 4,331,786 (Foy et al).

Foy et al disclose polyether-ester-amide block copolymers prepared by reacting a polyamide having terminal carboxylic acid groups with a polyoxyalkylene glycol. The reference provides various block copolymers comprising polyamide blocks and PTMG blocks meeting the

requirements of the above-rejected claims (examples 8-10 and 13-16, 18, 19). Suitable polyamide blocks include 11-dicarboxylic polyamide (obtained by polycondensation of 11-amino-undecanoic acid (corresponding to semi-crystalline monomer or comonomer of present claims) and adipic acid (corresponding to comonomer or semicrystalline monomer of present claims) and the reaction product of dihexylammonium azelate salt (corresponding to semi-crystalline monomer or comonomer of present claims) and adipic acid (corresponding to comonomer or semicrystalline monomer of present claims).

The exemplified block copolymers of the reference meet the requirements of the presently claimed products in terms of the types of materials used, molecular weight defining them and content thereof. Accordingly, given their chemical similarity, it would be expected that the reference products would necessarily possess all properties and characteristics governing the presently claimed products, e.g., shore D hardness. The onus is shifted to applicants to establish that the product of the present claims is not the same or obvious from those set forth by the reference.

Claim 5 is met when either the 11-amino-undecanoic acid or dihexylammonium azelate salt constituents of the exemplified block copolymers are interpreted as corresponding to the presently claimed comonomer.

5. Claims 1, 2, 5 and 8-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 6,300,463 (Figuly et al).

Figuly et al disclose elastomeric polymers that contain polyether blocks having tetramethylene ether repeat units, and polyamide blocks. The reference provides various block copolymers comprising polyamide blocks and PTMG blocks meeting the requirements of the

above-rejected claims (examples). Suitable polyamide blocks comprise the reaction product of nylon 12 (corresponding to semi-crystalline monomer or comonomer of present claims) and adipoyl units (corresponding to comonomer or semicrystalline monomer of present claims) and the reaction product of 11-aminoundecanoic acid (corresponding to semi-crystalline monomer or comonomer of present claims) and 1,10-decanedicarboxylic acid (corresponding to comonomer or semicrystalline monomer of present claims). The exemplified block copolymers of the reference meet the requirements of the presently claimed products in terms of the types of materials used, molecular weight defining them and content thereof. Accordingly, given their chemical similarity, it would be expected that the reference products would necessarily possess all properties and characteristics governing the presently claimed products, e.g., shore D hardness. The onus is shifted to applicants to establish that the product of the present claims is not the same or obvious from those set forth by the reference.

Claim 5 is met when either the nylon 12 or 11-amino-undecanoic acid constituents of the exemplified block copolymers are interpreted as corresponding to the presently claimed comonomer.

***Claim Rejections - 35 USC § 103***

6. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6,916,517 (Montanari et al).

Montanari et al disclose polyamide-based transparent compositions comprising, inter alia, a supple block copolymer containing polyamide blocks and polyether blocks as component (C) having Shore D hardness of between 20 and 75 (column 7, lines 10-13). Suitable block copolymers include the PEBA 12 used in the examples containing polyamide 12 blocks and

PTMG blocks. According to one embodiment of the reference, the polyamide blocks may be formed from the condensation of at least one aminocarboxylic acid and/or lactam, either one corresponding to the presently claimed semi-crystalline monomer or comonomer. In another embodiment, the polyamide blocks may be formed from the condensation of at least one aminocarboxylic acid (or lactam), corresponding to the presently claimed semi-crystalline monomer or comonomer, and at least one diamine and at least one dicarboxylic acid, said monomers corresponding to the presently claimed comonomer or semicrystalline monomer. Examples of suitable diamines include cyclic diamines, e.g., BACM and IPD as per present claims 6 and 7).

In essence, the disclosure of the reference differs from the presently claimed invention in not expressly exemplifying a block copolymer based on PTMG wherein the polyamide block is formed from both a semicrystalline monomer and comonomer as presently claimed. It would have been obvious to one having ordinary skill in the art, and within the general disclosure of the reference, to have used a block copolymer based on PTMG wherein the polyamide block is formed from a combination of reactants corresponding to the presently claimed semicrystalline monomer and comonomer. For example, it would have been obvious to one having ordinary skill in the art to have further condensed either a lactam, aminocarboxylic acid or cyclic diamine/dicarboxylic acid with the nylon 12 component used in the preparation of the exemplified PEBA 12 with the reasonable expectation of success. Accordingly, absent evidence of unusual or unexpected results, no patentability can be seen in the presently claimed subject matter.

***Response to Amendment***

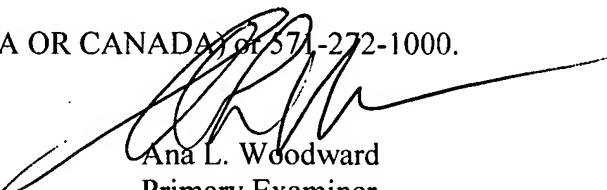
7. Applicant's amendments filed November 14, 2006 have effectively overcome the previous rejections over Chung et al.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (571) 272-1082. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ana L. Woodward  
Primary Examiner  
Art Unit 1711

\*\*\*